

3 | said periscope means, a rearward portion containing said image processing  
4 | elements and an underside portion dependent from said rearward portion, said  
5 | binocular tubular body portions being attached to said underside portion of said  
6 | camcorder housing, said periscope compartment including a window for entry  
7 | of said incident light into said periscope compartment, said periscope  
8 | compartment being structured to permit passage of said light to said image  
9 | processing elements of said camcorder.

1 | Claim 21. In combination with claim 12: said image processing elements  
2 | of said camcorder including an objective lens, said window being said  
3 | objective lens of said camcorder.

-----  
**EXAMINER'S REJECTION**

*"Claims 1, 12, and 21 are rejected under 35 U.S.C. 103(a) as being  
unpatentable over Plummer (#4,018,514) in view of Kamiya (#5,311,354).*

*"For claim 1, Plummer discloses a binocucorder (figs. 1/5), comprising:*

*"a camcorder (31) including image processing elements and a line-of-  
sight (col. 4, lines 39-43); col. 5, lines 3-8; col. 6, lines 6-41; col. 8, lines 33-39);*

*"a binocular (23), said camcorder being mounted on said binocular (col.  
4, lines 39-43); and*

*"periscope means (23) mounted on said camcorder adapted to receive  
incident light on said binocular effective line-of-sight and reflect said light onto  
said camcorder line-of-sight into said image processing elements of said  
camcorder (col. 4, lines 39-43).*

***"However, Plummer does not expressly teach a binocular including first and second tubular body portions which are spaced apart parallel to each other, each having a forward end incorporating an objective lens, having an effective line-of-sight centered between said objective lenses parallel to said tubular body portions.***

***"In a similar field of endeavor, Kamiya discloses a binocular including first and second tubular body portions which are spaced apart parallel to each other, each having a forward end incorporating an objective lens, having an effective line-of-sight centered between said objective lenses parallel to said tubular body portions. Please read col. 6, lines 44-58; col. 8, lines 28-45 and see figs. 4/6. In light of the teaching of Kamiya, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the binocular of Plummer with the binocular as claimed in order to achieve a desirable focusing condition thereby providing a desirable image."***

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**RESPONSE**

**1. Plummer does NOT disclose a camcorder. See Plummer col. 4, lines 43-45: "[A] conventional camera 31, here shown as a conventional single lens reflex camera for 35 mm film."**

**2. Plummer's "camera 31" (Fig. 5) is NOT mounted on a binocular; It is detachably secured to the rearward end of a long L-shaped "channel 11" that is fastened onto the top of a "helmet 9." The "channel 11" has a horizontally disposed rearward section 14 that is fastened to the "helmet 9" and a vertically**

disposed forward section 13 that extends downwardly in front of the user's face. Plummer's "binocular 23" is secured to the forward section 13 of the "channel 11". Since Plummer's "camera 31" is located overhanging the rearward end of Plummer's "helmet 9" (attached to the rearward end of Plummer's "channel 11"), while his "binocular 23" is located at the forward end of the "channel 11", Plummer's "camera 31" and his "binocular 23" are located remote from each other. Accordingly, Plummer's arrangement differs markedly from that of applicant's arrangement wherein applicant provides his binocular 17 (applicant's Fig. 1) directly attached to the underside of applicant's camcorder 44.

3. Plummer's "binocular 23" is NOT mounted on his "camera 31"; it is mounted on the forward end of his "channel 11".

4. Plummer's periscope means is NOT "*adapted to receive incident light on said binocular effective line-of-sight*". See Plummer's Fig. 6. The depending forward end of Plummer's "channel 11" is positioned perpendicular to the line-of-sight of his "binocular/periscope 23" and it depends upon a "beam splitter 67" to direct a portion of the incident light upwardly into the "channel 11".

Accordingly, the size and focus of the "Image P" that is directed into the "channel 11" and seen by the "camera 31" depends upon the size and focus of the "Image P" that is transmitted to the "beam splitter 67". That "Image P" is produced by a hand-held lens 60 which the physician manipulates to form an "aerial image P" of the patient's retina. Accordingly, Plummer's "camera 31" and his "binocular/periscope 23" DO NOT OPERATE INDEPENDENTLY OF EACH OTHER.

This contrasts with applicant's arrangement wherein a change in the size of the field of view of the binocular 17 has no effect upon the size of the field of view of the camcorder 44, thereby permitting the observer to zoom in or out on the target with the binocular 17 (if it has a zoom feature) without changing the size of the target as it is being recorded by the camcorder 44. This is an important advantage because there are times when one desires to get a better (i.e. somewhat closer) look at a target optically through the binocular by manipulating the zoom lever of a binocular that is so equipped, while still maintaining the binocular in wide enough field of view that the target will not be lost, but at the same time desires to keep the camcorder at a selected zoom setting.

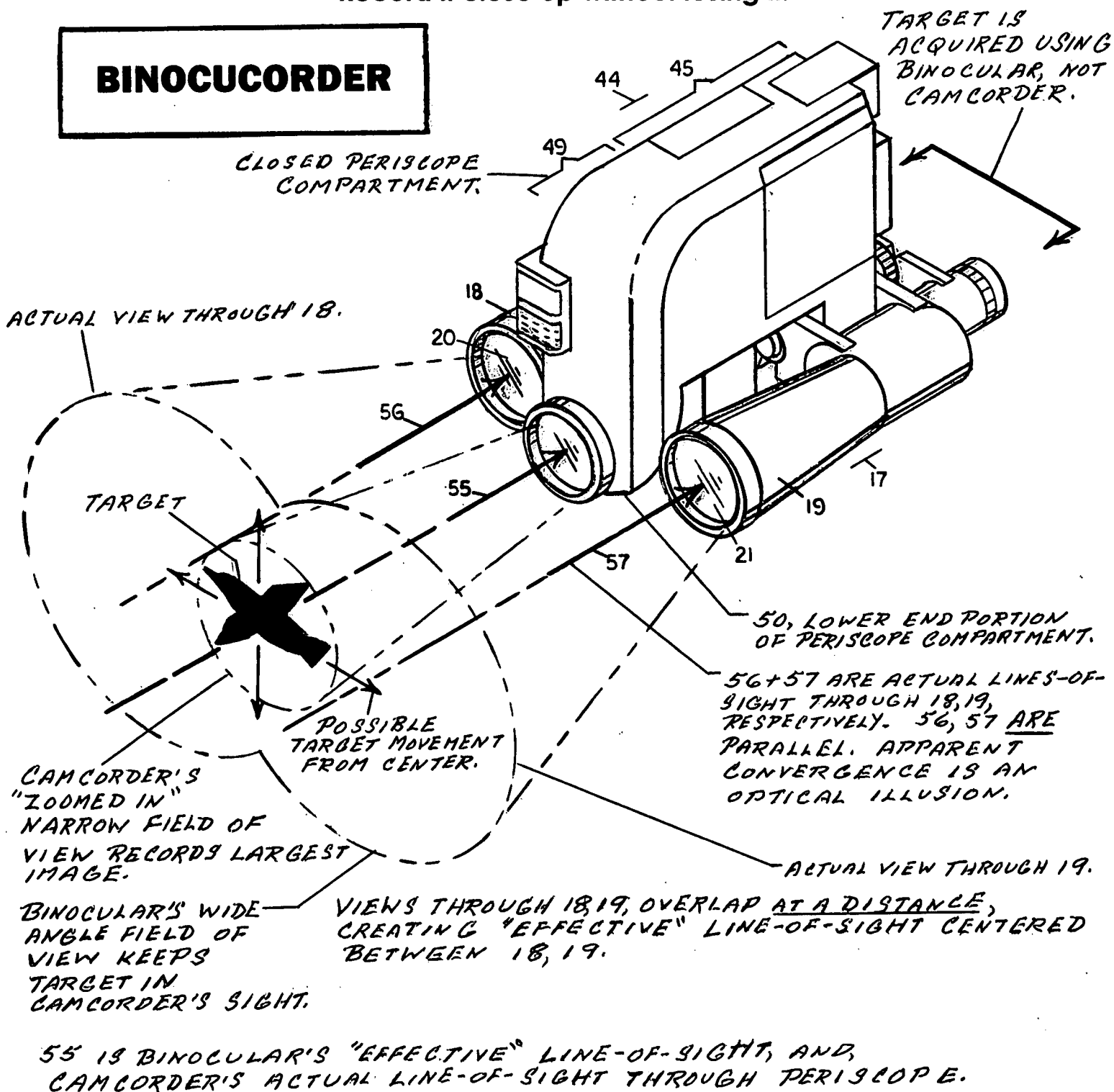
5. The Manual of Patent Examining Procedure ("MPEP"), on p. 2100-117 thereof (copy attached), states the following in a paragraph entitled "BASIC CONSIDERATIONS WHICH APPLY TO OBVIOUSNESS REJECTIONS":

"When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined."

Videotape what you're looking at through your binocular.  
Record it close up without losing it.

# BINOCUCORDER



### **DRAWING FORMING A PART OF THIS RESPONSE**

On the preceding page applicant provides a drawing forming a part of this response entitled "BINOCUCORDER" that may be helpful in the consideration of applicant's invention "as a whole" by showing the fields of view of the camcorder 44 and the binocular 17. All numerals are the same as those shown on the application drawings. No new matter has been added. The BINOCUCORDER drawing shows only what has been described in applicant's Specification.

The binocular's tubular body portions 18, 19, have objective lenses 20, 21, which receive incident light along axes 56, 57, respectively. A person looking through the binocular's eyepieces sees two different circular fields of view which overlap each other at some point in the distance (many feet away). Axes 56, 57, are the actual lines-of-sight of the binocular, and since they are spaced apart parallel to each other, the user of the binocular sees a three-dimensional image. By a proper adjustment of the spaced apart relationship of the binocular's tubular body portions 18, 19, and adjustment of focusing, the two circular fields of view appear to the user as a single relatively wider field of view having the overlapping configuration represented in the drawing. In order to fit the view on the sheet, the drawing shows this overlapping configuration located close to the binocular; but actually it occurs at some considerable distance away. The three-dimensional image that the user sees has a center that is located where the two circular fields of view overlap. That centerline along which the user sights his target is what applicant terms the binocular's "effective" line-of-sight. The numeral 55 identifies that "effective" line-of-sight. Applicant's

invention provides the camcorder 44 receiving incident light along that "effective" line-of-sight. This is accomplished by the camcorder 44 including a periscope compartment 49 that forms the forward end of the camcorder. The periscope compartment 49 has a lower end portion 50 that is narrow enough to fit between the binocular's tubular body portions 18, 19, and includes a window 51 through which incident light is received into the periscope compartment 49 along an actual line-of-sight that corresponds with the binocular's "effective" line-of-sight 55. When zoomed-in on a target the camcorder has a narrow field of view (represented by the small diameter circle) that is concentric about the binocular's "effective" line-of-sight 55. So long as the user keeps the target centered in the wide-angle field of view of the binocular, it will necessarily be centered in the narrow-angle field of view of the camcorder and so a close-up enlarged image will be recorded by the camcorder. Deviation of the target from centered position (the four arrows) is seen and easily compensated for before the target escapes the wide-angle field of view of the binocular.

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6. The new and useful result conceived by applicant's invention is the prevention of loss of a target when it is zoomed in on with a camcorder in order that a close-up image of the target can be continuously recorded by the camcorder. Applicant's invention (i.e., the new and useful result conceived) is characterized and identified by the ideas stated above. Every limitation recited in applicant's Claims 1, 12 and 21, plays its part in giving physical expression to those ideas. No one skilled in the art and studying the Plummer and Kamiya references, could find therein any suggestion that it would be desirable to

prevent loss of a target when it is zoomed in on with a camcorder in order that a close-up image of the target can be continuously recorded by the camcorder. And so the "new and useful result" conceived by applicant (which is graphically demonstrated by the BINOCUCORDER drawing) is NOT suggested by Plummer in view of Kamiya. Accordingly, there is NO MOTIVATION to combine the references Plummer and Kamiya in order to achieve a result that is suggested by neither reference. The mere presence in the references of certain elements such as the camera and the binocular/periscope in Plummer and the binocular in Kamiya, is not sufficient to anticipate applicant's use of these elements (as shown in the BINOCUCORDER drawing) because in applicant's mode of attainment these elements are greatly modified, changed and entirely rearranged; and further, because applicant's claims expressly limit his corresponding elements to certain specific forms and arrangement. For one example, applicant's Claim 12, Line 2, specifies "a closed periscope compartment". Plummer's "channel 11" (Fig. 6) is open at 75. For another example, applicant's Claim 12, Lines 4-6, specifies the camcorder's housing having "an underside portion dependent from said rearward portion, said binocular tubular body portions being attached to said underside portion of said camcorder housing". Plummer provides his "camera 31" mounted at the rearward end of his "channel 11" rearwardly of his "helmet 9", and provides his "binocular/periscope 23" mounted at the forward end of his "channel 11". Applicant's arrangement of elements is not an accident. It is applicant's specific form and arrangement of elements that give physical expression to the new and useful result which applicant has conceived.



**7. Plummer does not disclose a camcorder as applicant's claim 1 requires, he shows a single-lens reflex "camera 31" for use with 35 mm film. The purpose of applicant's invention is to enhance the performance of a camcorder, not a camera, and so applicant's Claim 1 specifies "a camcorder". A camera/binocular combination already exists in the prior art as stated in applicant's Specification, paragraph 0008:**

**"0008 The prior art is not known to disclose a miniature camcorder mounted on a binocular. The nearest prior art known appears to be a digital still photo camera incorporated in the body of a binocular between the tubular structures which house the optical elements of the binocular, and which has the capability of displaying on an included LCD monitor the last 30 seconds of what has been viewed through the binocular. A camcorder cannot be so located because said tubular structures would block opening of the LCD monitor, and also block opening of a second door which is located on the opposite side of the camcorder by means of which video cassettes are inserted into and removed from the camcorder."**

**8. The distinction between still-photo camera and camcorder is relevant because while a camera can be located between the tubular body portions of a binocular and so the manner of effecting such a combination is essentially obvious, a camcorder cannot be located and further invention is needed to cause the camcorder to sight along the "effective" line-of-sight of the binocular. The problem before applicant was how to combine a camcorder with a binocular in such a way that both sight on the same target and neither one interferes with operation and adjustment of the other. Plummer had no such**

problem before him. Plummer's concept was simply that of sighting on a narrow beam of light reflected from a person's retina and taking a photograph of it, and so his apparatus could be given any preferred form without concern about how his camera fits into the existing structure of a conventional binocular.

Applicant's problem, on the other hand, was how to make the camcorder and binocular sight on a target along a common axis but independently of each other, with operating clearance for each, and achieve that result within the context of a minimal size lightweight hand-holdable device comparable to that of a conventional binocular that does not have a camcorder attached to it.

Applicant's solution was simple and hindsight makes it appear obvious, but in point of fact, there is nothing in the prior art that suggests either the result conceived nor its mode of attainment. Applicant provided the camcorder having a novel housing including (a) a dependent underside portion onto which the tubular body portions 18, 19, of the binocular 17 could be attached; (b) a periscope compartment forming the forward end of the camcorder's housing; (c) proportioned such that a lower portion of the periscope compartment fits between the binocular's tubular body portions 18, 19; and (d) arranged such that incident light is received into the periscope on the "effective" line-of-sight axis of the binocular. Plummer teaches no such concept and does not suggest any such arrangement of structure.

#### **Plummer's Different Arrangement of Structure Is Significant**

9. Plummer's "camera 31" does not have a line-of-sight that looks at the target independently of the line-of-sight of Plummer's "binocular 23". Plummer uses a beam splitter 67 that is located on the line-of-sight of his "binocular 23" to

direct the image "P" into his "channel 11", and so the image seen by Plummer's "camera 31" depends upon the image seen by his "binocular 23". The image "P" seen by Plummer's "binocular 23" depends wholly upon the user's manipulation of a hand-held lens 60 which is manually positioned to provide a focused image "P" of the patient's retina. There can be no concept here of the target image being viewable in a wide-angle field of view because the light reflected from the retina must pass through the pupil of the patient's eye. And so, when Plummer's disclosure is "considered as a whole" as is required by the Rules, it is clear that there is nothing in Plummer's disclosure that suggests either applicant's end result or applicant's mode of attainment of that result. Accordingly, it is impossible for Plummer's disclosure to suggest addition of Kamiya's binocular to achieve applicant's result.

10. Plummer's "camera 31" is not "mounted on said binocular" as examiner has stated (using applicant's claim language). Plummer's camera 31" is mounted at the far rearward end of a "channel 11" which is itself located on top of a "helmet 9"; and Plummer's "binocular 23" is mounted remotely located at the forward depending end of the "channel 11". This is quite different from applicant's arrangement wherein the tubular body portions 18, 19, of applicant's binocular 17 are secured to and carried by an "underside portion 46" of applicant's camcorder 44; the said "underside portion 46" being a part of the camcorder's housing. This arrangement is no accident. It is the means by which one of the objects of applicant's invention is obtained. See applicant's Specification, paragraph 0006:

"0006 It is further desired to provide such a device in such a compact

size and light enough in weight that it can be conveniently hand-held, like a binocular when used alone."

That hardly describes Plummer's apparatus, which is such size and weight that it must be suspended from a ceiling as shown in Plummer's Fig. 2.

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**KAMIYA**

On page 3 of examiner's action, examiner continues his rejection of applicant's Claim 1 by applying Kamiya, stating:

*"In light of the teaching of Kamiya, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the binocular of Plummer with the binocular as claimed in order to achieve a desirable focusing condition thereby providing a desirable image."*

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**RESPONSE**

11. MPEP p. 2100-129 (copy attached) states:

**"THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART  
UNSATISFACTORY FOR ITS INTENDED PURPOSE**

**"If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."**

12. In a binocular the fields of view through each of the binocular's tubular body portions overlap each other only at a considerable distance many feet away in front of the binocular, therefore the "effective" line-of-sight of the binocular does not exist immediately in front of the binocular. If one were to

replace Plummer's "binocular 23" with Kamiya's "binocular 1" (Kamiya Fig. 1), the user would be looking past the patient along parallel lines-of-sight which are spaced apart from each other and therefore such a substitution would render Plummer's device useless since the physician would not be able to see into the patient's eye. This limitation of a binocular is well-known in the art and is noted by Kamiya in his Specification, Lines 25-26: "[A] binocular is generally used for viewing a distant object ...".

13. It is not an accident that Plummer did not use a conventional binocular instead of the special "binocular 23" construction that he shows. See Plummer's Fig. 7. Plummer's hand-held lens 60 forms an "image P" that is projected onto a "beam splitter 67". A portion of the light from the "image P" passes through the "beam splitter 67" and enters the "housing 65" through an "entrance aperture 66 of the periscope housing 65" (Plummer Specification, Col. 6, Lines 19-22). Plummer's "binocular 23" thereby positively receives a single narrow beam of light (i.e., is not dependent upon receipt of incident light along an "effective" line-of-sight), and that single narrow beam of light is then reflected off mirrors 69, 70, and through eye lenses 72, 74, respectively, whereby the observer is enabled to view the "image P" using both of his eyes (without seeing a three-dimensional image of the patient's retina). Evidently, Plummer did not feel that there was any advantage to be gained by having a three-dimensional image of the patient's retina and he provided his binocular eyepieces merely for viewing comfort--he could just as well NOT have included his "binocular 23", he could have had the physician viewing the "image P" using a single eye without loss of function other than diminished convenience.

14. Restating the above, Plummer's "binocular 23" is not a true binocular; it might be more accurately termed a "binocular eyepiece". Plummer evidently provides such a binocular eyepiece in recognition that a true (conventional) binocular would be worthless, since, as shown in applicant's submitted BINOCUCORDER drawing, at a distance immediately in front of a conventional binocular it can only see along separate parallel spaced-apart lines-of-sight 56, 57. It is only at a considerable distance away that the expanding fields of view will finally overlap as shown in applicant's BINOCUCORDER drawing and thereby be able to see the target centered on an "effective" line-of-sight. Given these facts, there is nothing in Plummer's disclosure that either suggests or provides a motivation for provision of Kamiya's binocular in substitution for Plummer's "binocular 23".

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**EXAMINER'S REJECTION - Continued**

*"For claim 12, Plummer, as modified by Kamiya, discloses in combination with claim 1: said camcorder having a housing having a forward portion defining a closed periscope compartment containing said periscope means, a rearward portion containing said image processing elements and an underside portion dependent from said rearward portion, said binocular tubular body portions being attached to said underside portion of said camcorder housing, said periscope compartment including a window for entry of said incident light into said periscope compartment, said periscope compartment being structured to permit passage of said light to said image processing elements of said*

**camcorder. Please see fig. 5 and read col. 4, lines 8-43."**

-----

**RESPONSE**

15. Plummer modified by Kamiya DOES NOT disclose a *"a camcorder having a housing having a forward portion defining a closed periscope compartment..."*. Plummer discloses a single-lens reflex "camera 31" that is detachably secured to a "channel 11" (Plummer's periscope means). The "channel 11" does not form an integral part of Plummer's "camera 31". The housing of the "camera 31" DOES NOT have a forward portion that forms the "channel 11". The "camera 11" is simply detachably secured to the "channel 11" in the same manner as a telephoto lens is conventionally attached to a camera. The "channel 11" forms no part of the housing of the camera itself. Applicant provides a camcorder 44 having a housing a forward portion of which is a closed periscope compartment, the periscope compartment being formed integrally with the camcorder. Applicant's Claim 12, Lines 1-2, specifically restricts Claim 1 to a "camcorder having a housing having a forward portion defining a closed periscope compartment...". For examiner to hold otherwise is to disregard what is shown in applicant's drawings, what is described in applicant's specification, and what is positively recited as a limitation in applicant's Claim 12. Claim 12 recites a preferred embodiment wherein the camcorder has a housing that includes both a closed periscope compartment and the image processing elements of the camcorder. By forming the periscope compartment and the main body of the camcorder in one piece, applicant ensures that no dust will be able to get into the periscope compartment and obscure the image that is reflected off the optical elements of

the periscope compartment. Plummer's arrangement makes no such provision. Each time he detaches his "camera 31" in order to replace the film, dust will be able to enter his "channel 11", such dust particles getting at least as far as the rearward side of the "lens 32" (Plummer's Fig. 5).

16. Plummer's "channel 11" IS NOT "a closed periscope compartment" (applicant's Claim 12, Line 2). As Plummer shows in his Fig. 6, the "channel 11" is open at 75; which means that Plummer's "channel 11" is exposed to entry of dust not only at the "camera 31" end but also at the "binocular 23" end of his "channel 11". The opening at 75 permits dust particles to reach Plummer's "mirror 76" and also the forward side of the lens 32. Accordingly, Plummer's "channel 11" (or periscope compartment, if examiner prefers) is entirely OPEN. This is the OPPOSITE of what applicant claims in Claim 12.

17. Plummer's "camera 11" DOES NOT have "an underside portion DEPENDENT from said rearward portion". (Applicant's Claim 12, Line 4, emphasis added). Applicant's camcorder has its housing configured to provide an "underside portion 46" (See Fig. 1 of application drawings as well as the BINOCUCORDER drawing. Applicant's camcorder 44 MUST have such an underside portion in order that the tubular body portions 18, 19, can be attached to the camcorder's housing. Plummer's "camera 11" has no need for such a provision because the forward side of his "camera 31" conventionally includes a lens mount that enables it to be attached to the rearward end of his "channel 11", which, in turn, is secured to the "helmet 9".



**18. Kamiya modifying Plummer by addition of Kamiya's "binocular 1" (Kamiya, Fig. 1), DOES NOT result in what is recited in applicant's Claim 12, Lines 4-6: "said binocular tubular body portions being attached to said underside portion of said camcorder housing".**

**(a) Plummer does not provide Kamiya's binocular with a "camcorder housing" onto which Kamiya's binocular could be attached; Plummer provides only a conventional camera body; and,**

**(b) Since Plummer can only provide Kamiya with a conventional camera body, there is no "underside portion dependent from said rearward portion" (applicant's Claim 12, Line 4) to which the "first and second barrels 11, 12" (Kamiya Specification, Col. 6, Lines 28, 29, and Fig. 4) of Kamiya's binocular can be attached.**

**19. MPEP p. 2100-126 (copy attached):**

**"[T]he prior art reference (or references when combined) must teach or suggest all the claim limitations.**

**"The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure."**

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**EXAMINER'S REJECTION - Concluded**

***"For claim 21, Plummer, as modified by Kamiya, discloses in combination with claim 12: said image processing elements of said camcorder including an objective lens (not numbered), said window being said objective lens of said camcorder. Please read col. 4, lines 39-47."***

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**RESPONSE**

20. The "window" referred to in Line 2 of applicant's Claim 21 is a part of the periscope. Claim 21 is dependent from Claim 12 and therefore includes the language of Claim 12, Lines 6-7: "said periscope compartment including a window for entry of said incident light into said periscope compartment". In Fig. 1 of applicant's drawings (as well as in the BINOCUCORDER drawing herein), the numeral 49 (associated with a bracket) identifies applicant's "periscope compartment", the numeral 50 identifies the lower end portion of the periscope compartment 49, and the numeral 51 identifies a window with which the lower end portion 50 of the periscope compartment 49 is provided "for entry of said incident light into said periscope compartment". Accordingly, the "window" that is recited in applicant's Claim 21 forms a part of the periscope compartment 49 and DOES NOT form a part of the "camcorder 45" (bracketed) section of the camcorder's housing. In the embodiment depicted in Fig. 1, the "window 51" is plain glass, having no optical function with respect to processing the image received on the incident light axis 55. In the Fig. 1 embodiment the "window 51" functions only to permit "entry of said incident light into said periscope compartment" (Claim 21, Lines 6-7) while maintaining the dust-free integrity of the periscope compartment 49. In the Fig. 1 embodiment the camcorder

section 45 includes an objective lens 48 that is located according to conventional practice. Fig. 2 shows an alternative embodiment wherein the objective lens 48 is located at the lower end portion 50 of the periscope compartment 49 (in substitution for the plain glass window 51 of the Fig. 1 embodiment) where it serves not only to seal the periscope compartment but also to partially process the image that is received along the incident light axis 55. This subject matter is covered in paragraphs 0013 and 0015 of applicant's Specification.

21. The explanation given above, as well as paragraphs 0013 and 0015 of applicant's Specification, makes it unmistakably clear that the "objective lens" that is referred to in applicant's Claim 21 is located at the light INPUT end of applicant's periscope. It DOES NOT form a part of the camcorder section per se.

22. The key language in Claim 21 appears on Lines 2-3: "said window being said objective lens of said camcorder." The language preceding this phrase on Lines 1-2 of Claim 21 ("said image processing elements of said camcorder including an objective lens") provides the necessary antecedent basis for the novel limitation: "said window being said objective lens of said camcorder". Claim 21 is referring to the physical nature and optical function of the window with which the periscope is provided. Claim 21 is not referring to the conventionally-located objective lens that is shown in the Fig. 1 embodiment. The contemplated advantage of the Fig. 2 embodiment is that it reduces to an absolute minimum the amount of glass that the incident light 55 needs to pass through on its way into the image processing elements of the camcorder so that

the brightest image is received by the camcorder--an important advantage when videotaping at night.

23. Plummer as modified by Kamiya, DOES NOT disclose an objective lens that is located at the light receiving end of Plummer's "channel 11". The unseen objective lens of Plummer's "camera 31" (Fig. 5) forms a part of his "camera 31" and is hidden inside the "cylindrical section 30" (Plummer's Specification, Col. 4, Line 41) of his "channel 11". Repeating, Plummer's objective lens is part of his "camera 31"; it is NOT part of the light-input end of his "channel 11"; and indeed, it CANNOT BE, since Plummer's Fig. 5 shows that the light-input end of his "channel 11" is OPEN at 75. Plummer, Specification, Col. 6, Lines 14-15, refers to "a window 75 in the housing 11". Plummer evidently is using the term "window" in the broad sense of an aperture or open space and not in the sense of a glass pane.

-----

#### **CONCLUSION**

1. Applicant has shown that neither Plummer nor Kamiya, alone or in combination, suggests:

(A) applicant's end result of enabling a camcorder to be zoomed in on a distant target without loss of the target; or,

(B) applicant's mode of attainment involving:

(a) the camcorder being mounted on top of a binocular such that operating clearance is provided for both the camcorder and the binocular;

(b) the camcorder and binocular being operable in narrow and wide-angle fields of view, respectively, independently of each other; and,

**(c) provision of the camcorder with a periscope that enables the camcorder to receive incident light on the effective line-of-sight of the binocular so that the camcorder's narrow field of view is centered within the binocular's wide-angle field of view.**

**2. Applicant has shown that Plummer modified by Kamiya does not produce the compact and lightweight hand-holdable device that is one of the objects of applicant's invention.**

**3. Applicant has shown that Plummer modified by Kamiya renders Plummer's apparatus inoperable, thereby precluding motivation by one skilled in the art to make such combination. See MPEP p. 2100-129 (copy attached):**

**"If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification."**

**Accordingly,**

**1. "[T]he references considered as a whole" do not "suggest the desirability and thus the obviousness of making the combination". MPEP p. 2100-117 (copy attached); and,**

**2. "The teaching or suggestion to make the claimed combination" is not found in the prior art but only "in applicant's disclosure." MPEP p. 2100-126 (copy attached).**

**\* \* \***

the *Graham* factual inquiries. It should be noted that the Supreme Court's application of the *Graham* test to the fact circumstances in *Ag Pro* was somewhat stringent, as it was in *Black Rock*. Note *Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963, 200 USPQ 769 (7th Cir. 1979). The Court of Appeals for the Federal Circuit stated in *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540, 218 USPQ 871, 880 (Fed. Cir. 1983) that

A requirement for "synergism" or a "synergistic effect" is nowhere found in the statute, 35 U.S.C. When present, for example in a chemical case, synergism may point toward nonobviousness, but its absence has no place in evaluating the evidence on obviousness. The more objective findings suggested in *Graham*, supra, are drawn from the language of the statute and are fully adequate guides for evaluating the evidence relating to compliance with 35 U.S.C. § 103. *Bowser Inc. v. United States*, 388 F.2d 346, 156 USPQ 406 (Cl. Cl. 1967).

&gt;

## II. < BASIC CONSIDERATIONS WHICH APPLY TO OBVIOUSNESS REJECTIONS

When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined.

*Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

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## III. < OBJECTIVE EVIDENCE MUST BE CONSIDERED

Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present. When evidence of any of

these secondary considerations is submitted, the examiner must evaluate the evidence. The weight to be accorded to the evidence depends on the individual factual circumstances of each case. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987). The ultimate determination on patentability is made on the entire record. *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). >However, evidence developed after the patent grant in response to challenge to the patent validity's should not be excluded from consideration since "understanding the full range of the invention is not always achieved at the time of filing the patent application." *Knoll Pharms. Co., Inc. v. Teva Pharms. USA Inc.*, 367 F.3d 1381, 1385, 70 USPQ2d 1957, 1960 (Fed. Cir. 2004). (reversing the lower court's grant of summary judgment of invalidity for failure to consider 'unexpected results' evidence obtained from post-filing that could be relevant to the patent validity inquiry).<

See MPEP § 716 - § 716.06 for a discussion of objective evidence and its role in the final legal determination of whether a claimed invention would have been obvious under 35 U.S.C. 103.

## 2141.01 Scope and Content of the Prior Art [R-3]

### I. PRIOR ART AVAILABLE UNDER 35 U.S.C. 102 IS AVAILABLE UNDER 35 U.S.C. 103

"Before answering *Graham*'s 'content' inquiry, it must be known whether a patent or publication is in the prior art under 35 U.S.C. § 102." *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568, 1 USPQ2d 1593, 1597 (Fed. Cir.), cert. denied, 481 U.S. 1052 (1987). Subject matter that is prior art under 35 U.S.C. 102 can be used to support a rejection under section 103. *Ex parte Andresen*, 212 USPQ 100, 102 (Bd. Pat. App. & Inter. 1981) ("it appears to us that the commentator [of 35 U.S.C.A.] and the [congressional] committee viewed section 103 as including all of the various bars to a patent as set forth in section 102.").

A 35 U.S.C. 103 rejection is based on 35 U.S.C. 102(a), 102(b), 102(e), etc. depending on the type of prior art reference used and its publication or issue

20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections.

When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). A statement of a rejection that includes a large number of rejections must explain with reasonable specificity at least one rejection, otherwise the examiner procedurally fails to establish a *prima facie* case of obviousness. *Ex parte Blanc*, 13 USPQ2d 1383 (Bd. Pat. App. & Inter. 1989) (Rejection based on nine references which included at least 40 prior art rejections without explaining any one rejection with reasonable specificity was reversed as procedurally failing to establish a *prima facie* case of obviousness.).

If the examiner determines there is factual support for rejecting the claimed invention under 35 U.S.C. 103, the examiner must then consider any evidence supporting the patentability of the claimed invention, such as any evidence in the specification or any other evidence submitted by the applicant. The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it. With regard to rejections

under 35 U.S.C. 103, the examiner must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a *prima facie* case of obviousness) is more probable than not.

When an applicant submits evidence, whether in the specification as originally filed or in reply to a rejection, the examiner must reconsider the patentability of the claimed invention. The decision on patentability must be made based upon consideration of all the evidence, including the evidence submitted by the examiner and the evidence submitted by the applicant. A decision to make or maintain a rejection in the face of all the evidence must show that it was based on the totality of the evidence. Facts established by rebuttal evidence must be evaluated along with the facts on which the conclusion of obviousness was reached, not against the conclusion itself. *In re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990).

See *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984) for a discussion of the proper roles of the examiner's *prima facie* case and applicant's rebuttal evidence in the final determination of obviousness. See MPEP § 706.02(j) for a discussion of the proper contents of a rejection under 35 U.S.C. 103.

## 2143 Basic Requirements of a *Prima Facie* Case of Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

cementitious composition by driving the output pump at a capacity greater than the feed rate. The prior art reference taught that the feed means can be run at a variable speed, however the court found that this does not require that the output pump be run at the claimed speed so that air is drawn into the mixing chamber and is entrained in the ingredients during operation. Although a prior art device “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).

#### IV. FACT THAT THE CLAIMED INVENTION IS WITHIN THE CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH *PRIMA FACIE* OBVIOUSNESS

A statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of a skilled artisan that would have motivated the skilled artisan to make the claimed invention); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.).

#### V. THE PROPOSED MODIFICATION CAN- NOT RENDER THE PRIOR ART UNSAT- ISFACTORY FOR ITS INTENDED PURPOSE

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) (Claimed device was a blood filter assembly for use during medical procedures wherein both the inlet and outlet for the blood were located at the bottom end of the filter assembly, and wherein a gas vent was present at the top of the filter assembly. The prior art reference taught a liquid strainer for removing dirt and water from gasoline and other light oils wherein the inlet and outlet were at the top of the device, and wherein a pet-cock (stopcock) was located at the bottom of the device for periodically removing the collected dirt and water. The reference further taught that the separation is assisted by gravity. The Board concluded the claims were *prima facie* obvious, reasoning that it would have been obvious to turn the reference device upside down. The court reversed, finding that if the prior art device was turned upside down it would be inoperable for its intended purpose because the gasoline to be filtered would be trapped at the top, the water and heavier oils sought to be separated would flow out of the outlet instead of the purified gasoline, and the screen would become clogged.).

“Although statements limiting the function or capability of a prior art device require fair consideration, simplicity of the prior art is rarely a characteristic that weighs against obviousness of a more complicated device with added function.” *In re Dance*, 160 F.3d 1339, 1344, 48 USPQ2d 1635, 1638 (Fed. Cir. 1998) (Court held that claimed catheter for removing obstruction in blood vessels would have been obvious in view of a first reference which taught all of the claimed elements except for a “means for recovering fluid and debris” in combination with a second reference describing a catheter including that means. The court agreed that the first reference, which stressed simplicity of structure and taught emulsification of the debris, did not teach away from the addition of a channel for the recovery of the debris.).